St. Bartholomew's Hospital Journal.

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NOTICE.

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St. Bartholomew's Hospital Journal,

NOVEMBER 14th, 1893.

"Æquam memento rebus in arduis
Servare mentem."—*Horace,* Book ii., Ode iii.

WE understand that several first-rate football players, who have distinguished themselves at the Universities and elsewhere, have entered the Hospital recently. We heartily welcome them, and look to them to help in working up first-rate representative football teams for the Inter-Hospital cup ties. It is, however, said that some of these men are playing for outside clubs, and do not intend to be active members of our own clubs until later on, when they will join in the cup ties. We greatly deprecate this, for we feel very strongly that a man should always give his own hospital clubs a preference to any outside ones. All the athletics at St. Bartholomew's are now worked on the amalgamated principle, and those students who take any interest in athletics at all, are, at least, members, and, at least, support the clubs financially, but we expect more of those who are active and tried players. Amongst the students there are, of course, those who are especially interested in one particular club, *e.g.*, the football, and who do their best to make the constituent clubs respectively as strong as possible. Owing to the fact that students are leaving and others beginning, there must be, each year, changes in the teams, sometimes extensive changes. Teams, therefore, are not ready made, but have to be worked up; and we consider it to be the bounden duty of those who are the most competent, to undertake the task of making the clubs, of which they are members and to which they give their support financially, as strong as they can possibly be. Instead of this, it seems that some of the most competent men in the School are playing for outside clubs, and leaving it to others, less competent than themselves, to work up a team. Then later on, in the cup ties, they, who have worked least for the general good, appear to intend to step in and partake of the victorious honours which others have worked for. There can be nothing more disheartening to those who continuously give their support than to find at the last moment, in the cup ties, that they are displaced by others who have evinced no interest in the clubs except the honour to play in such matches as they deem good enough for them. It is also a well-known fact that a team which has worked together throughout the season is better on the whole, though individually inferior, to another team composed of men taken at the last moment to make a good show on paper. A very usual result of this sort of practice is that the men who are most keen do not see the use of playing regularly only to be ousted by others when the better matches are played. We therefore urge all those strongest players who contemplate taking part in any of the cup-tie matches to begin to play for the Hospital now, and to help in the working up of a team strong enough to win the cup for us, and not to leave it till too late, when the chances of victory may be greatly diminished. By so doing they would also prevent any discord, which cannot be otherwise than detrimental, but which is almost certain to occur if they step in later on to play in the cup-tie matches.

DR. NORMAN MOORE has introduced as an accessory to his lectures in Medicine a new and distinctly original feature, by giving out on printed slips of paper the number of the beds of the patients in the wards of the Hospital who are the subjects of the disease he is lecturing on at the time. These are supplied to him by the Medical Registrar. On the same slips are the numbers of the specimens in the

museum which illustrate the various stages in the morbid anatomy of the disease.

This innovation we most cordially welcome, as it gives the students an increased interest in the lectures, and stimulates their interest in the art of Medicine by imparting a great reality to it. The knowledge, that there are many of their fellow-men suffering from a disease which it is of the greatest importance to know thoroughly, goes a long way towards dispelling the idea of lecture attendance being a drudgery which the students must go through merely for the sake of being signed up for examination. It rather inclines them to look forward to the lectures with anticipation and pleasure.

We would gladly see the same method adopted in Surgery and Midwifery, &c., as it greatly adds to the ease with which students can acquire the most knowledge with the least unnecessary loss of time.

Students are now able to verify, by merely going into the wards with the physicians, the statements made by the lecturer, whereas formerly, their attention not having been directed to any particular cases, they either did not see them, or were obliged to spend a good deal of time in searching for them—time which they could ill afford, considering how much is expected from them now at the examinations. They are able, further, to study the various phases of the same disease in the living subject at the same sitting, as it were, and so acquire a method of observation hitherto supposed to be born in the man, or only with the greatest diligence acquired.

They can then go to the P.M. room or the museum and see the different stages of the morbid anatomy of the disease, and so can acquire a thorough mastery of the subject with the least expenditure of time. The advantage of having the numbers of specimens in the museum ready at hand is incalculable, for it saves a great deal of time, which can now be devoted to studying the specimens, and that in former times was wasted in looking for them. No one can realise this tantalising "looking for specimens" unless he has tried it.

We congratulate Dr. Moore on his innovation, about which there is not the slightest doubt but that it is a step in the right direction towards removing a great obstacle in the acquirement of medical and surgical knowledge, and we sincerely trust that his very excellent example in relieving the difficulties of the students will be adopted by other lecturers.

THE five years' curriculum, about which much has been said and written, is, we think, a most salutary improvement in the course of medical education. The extent of the knowledge which, owing to the advance and spread of science, public opinion now demands of the practitioner has in the last two decades vastly increased. It was only lately said that the days of the generally informed man are numbered, and that we shall soon develop into a profession of specialists, so great is now the scope of the several branches of medical science, that no one man could be good at them all Notwithstanding this, we strongly deprecate specialism, and we warmly approve of the extended curriculum, which, it seems to us, ought to check the tendency towards specialism. The extended curriculum and the rearrangement of the course of study, should now enable a student by diligence to gain a good knowledge of the general principles of all branches, and should in the future produce better practitioners. It is only those who have a good general knowledge of all branches of medical science who can make the greatest advances in medicine.

The entry into the medical schools this year concerns us most, as indicating what effect the extended time of medical study is likely to have on the number of qualified men in the future. As far as we are able to judge from published statistics, there is no marked diminution in the total number of students entering all over England, though there is some diminution in London, and a slight increase in the Provinces.

On referring to the figures as to our entry, to be found on another page, we find that in spite of the increase of fees, the number beginning the study of medicine, either as full students or in the Preliminary Scientific Class, is up to the average. With some of the other schools this appears also to be the case, although at some of the smaller ones there is a considerable falling off.

The extension of the curriculum has added a fifth year, to be devoted entirely to clinical study. Attendance at a fever hospital, as well as clinical instruction at a lunatic asylum and clinical study in ophthalmic surgery, are now compulsory. At the beginning of the course there has been added instruction in biological science. All these changes are of the greatest importance in the training of general practitioners, the introduction of biology because it leads to the better understanding of not only the normal, but also the pathological, processes which take place in the human body. Instruction at a fever hospital will make future practitioners efficient in the treatment of acute infectious disease, and carry with it some knowledge of preventive medicine, which cannot fail to be of the greatest service. Clinical instruction in insanity seems to be most necessary so as to prevent those egregious errors which at present those not proficient in the subject so often fall into, much to the discredit of the profession, and the discomfort of their patients.

WE are informed that the percentage of passes amongst Bart's men in the different parts of the final examination of the Conjoint Board, in October, is exceedingly good. In medicine, 61 per cent. passed, in surgery 80 per cent., and in midwifery 74 per cent. The total rejections from all schools in medicine were very numerous, only about 40 per cent. passing, so that the numbers from Bart's are exceedingly satisfactory. Although our percentage of passes in medicine

is, we are told, larger than from any other medical school, yet we should like to see a still better result. There is no lack of most valuable clinical material, but a very valuable part of it is at present quite useless from the student's point of view. We refer especially to the large casualty out-patient department, where there is an enormous number of just that class of cases which are most met with in general practice, and which the ordinary student at present is unable to learn from. The only men in the Hospital who now benefit by these cases are the junior house physicians. Could not something be arranged by which a certain number of senior students might have the benefit of working in this department under the casualty physicians and house physicians as medical casualty clerks?

The Amalgamated Clubs.

I SUPPOSE that the title, "The Amalgamated Clubs," is one that to many old students requires an explanation, for I am often asked what it means, and what are the clubs which have been amalgamated. The answer to such questions is a brief one. The clubs amalgamated are the various students' clubs, such as the football, cricket, and athletic clubs, but in order to appreciate the present position of affairs I think it will prove of some interest to old students if I give a brief explanation of the course of club events which have led to this result.

I think that the first suggestion of an amalgamation of the clubs came from one of our best performers on the running path, Mr. Kent Hughes, some four or five years ago, but no definite scheme was forthcoming, and the subject lapsed, after a somewhat desultory discussion at a general meeting called for the purpose. From that time onwards, however, the subject never quite dropped out of sight, and it was again brought to the fore by the present Editor of our Journal, Mr. Borcherds, in the latter part of 1891. Meantime, opinions had ripened on the subject, many of the colleges at the older Universities had adopted the system of club amalgamation, and, in London, Guy's and St. Thomas's Hospitals had followed suit.

The advantages urged were sufficiently obvious. The method of collecting subscriptions for each separate club by different secretaries involved a great deal of trouble and much expenditure of time, and the process was not appreciated either by the secretaries or by those to whom they applied for subscriptions. Next, it was felt that a considerable saving might well be effected if the football and athletic clubs could combine in the matter of a ground, and finally, it was evident that, if the students were ever to obtain a ground of their own, it must be a ground common to all the clubs who might wish to use it, and that until they combined a ground could not be obtained. Further, it was urged that if most of the students joined all the clubs at the beginning of their hospital career they were more likely, as members of them, to take an active interest in their welfare Such arguments as these prevailed, and after each club had passed formal resolutions advocating union, the proposals for amalgamation were carried with absolute unanimity at a general meeting of the students held in the Anatomical Theatre on July 17th, 1892.

But whilst amalgamation was evidently most useful, it was felt that nothing should be done to destroy the separate life and management of the several clubs effected, and it was therefore arranged that each should continue, as heretofore, to elect its own officers and to manage its own internal affairs, whilst the amalgamation should be for financial purposes alone.

The scheme, which was finally approved by the Medical Committee as well as by the students, therefore involved the formation of a "Finance Committee," composed of representatives of the different clubs, with two members of the Medical Committee, whose business it should be to examine into the requirements of each club, to consider estimates for their yearly expenditure, and to grant such sums of money from a common fund as appeared from time to time to be necessary. The income of the committee is derived from two sources. First, students on entry are invited to join the "Amalgamated Clubs," and pay the single subscription required for permanent membership, and parents and guardians readily acquiesce in an arrangement whereby a single payment prevents any further call for annual subscriptions on the parental purse, and places the new student at once in direct communication with those more senior to him, and in many cases finds him useful friends. Second, the Medical Committee pay annually a fixed sum towards the expenses of the clubs.

The system thus roughly sketched has now been in work for rather more than a year, and has succeeded beyond all expectations. The number of members has increased daily, and now comprises more than 300 students; the finance has worked smoothly and well, and no difficulties have arisen which could not be easily overcome. And now that the enterprise has been fairly floated, it is natural to take the next step towards one of the original objects in view, and to obtain a suitable ground. Here again matters have progressed satisfactorily. A sufficient sum of money has been placed at the disposal of a special committee to enable them to purchase a suitable ground and to fence and prepare it for cricket, football, and lawn tennis. It is of course difficult to find at once a ground which is at the same time conveniently situated and adapted to the purpose, but at present it may be said that several grounds have been inspected, and that the purchase of one or other of them is now merely a matter of time. It is, indeed, probable that some definite announcement on this point will be found in an early number of this Journal.

This short sketch, however, would be very incomplete if I failed to allude to the origin of this Journal itself. The

desire for such a publication was widespread in the school, and the Finance Committee concurred in the general belief that it would be successful and would prove of interest to past and present students alike. The result of this decision has already been made known to all Bart's men, and the first number of this Journal, which is the official journal of this "Amalgamated Clubs," has been in the possession of all old students for some little time past.

I should, however, like to take the present opportunity of explaining how much the past students have now in their power for the benefit of their successors in their old school. The one thing necessary for the permanent success of this Journal is a sufficient number of regular subscribers, so that the promoters of the enterprise may not only be spared expense, but may derive some benefit from the publication. I have already said that the income of the "Amalgamated Clubs" is derived from two sources, the students and the Medical Committee. I hope that to these we may now add a third source of income. I am sure that most old students would wish to see their successors in possession of a Hospital ground, and would be willing to assist as much as possible to bring it within easy reach. There are more than 2,000 Bart's men in Great Britain, and if they will each subscribe to the Journal the five shillings required for a year's publication, they will at once place the existing students in possession of sufficient means to pay all interest on the money borrowed for purchase, and to ensure the proper development of the ground.

I think an appeal may be especially made with confidence to those who in former years took an active part in the work of the football, cricket, and other clubs. They will, more than others, be able to appreciate the advantages of a ground, and while they subscribe to the Journal to the benefit of present students, I trust they will also find that it is of interest for its own sake. I am sure it is not too much to hope that the past students who read it will help those who have deserved well by helping themselves, and will assist the enterprise of the present students by becoming subscribers to their Journal. That they may read therein of the continued success and prosperity of the "Amalgamated Clubs," must be the sincere hope of all well-wishers of our Medical School.

ANTHONY BOWLBY.

GENERAL MEETING, Oct. 11, 1893.

A general meeting of the members of the Amalgamation was held in the Anatomical Theatre on Oct. 11th, 1893, at 12.30. Dr. Shore (the President) took the chair. Twenty members only were present.—After the minutes had been read and confirmed, Mr. Borcherds (the retiring Assistant Secretary) proposed the election of Mr. H. B. Meakin as Secretary for the current year.—Mr. Hay having seconded it, the proposal was put and carried *nem. con.*

The President pointed out how useful it had been during the past year to have the services of an Assistant Secretary, and suggested that the office be continued for this year.—Mr. Borcherds then proposed, and Mr. R. C. J. Stevens seconded, "That Mr. H. Bond be appointed Assistant Secretary for a year."—This was unanimously carried.

The President spoke of the great services which the outgoing Secretary (Mr. W. G. Richards) and the Assistant Secretary (Mr. W. M. Borcherds) had rendered in connection with the general business of the Amalgamation during the first year of its existence, and proposed a hearty vote of thanks to them for their services.—This was carried with acclamation.

The rest of the business was postponed owing to the want of a sufficient quorum.

GENERAL MEETING, Oct. 20, 1893.

A general meeting of the Amalgamation took place in the Anatomical Theatre on October 20th, 1893, at 12.30. Dr. Shore (President) took the chair. There was a good attendance.—The minutes were read and confirmed.

The business of the meeting was to make alterations in the rules so as to supply sufficient funds to enable the Finance Committee to enter into negotiations with the Medical School in reference to a ground for the permanent use of the Clubs.

The President explained that the Medical School was prepared to purchase land, to level it, prepare it for play, and to erect a pavilion on it at a cost of several thousand pounds, and that in order to maintain it it would be necessary to raise the subscription for life membership.—Mr. Meakin proposed, and Mr. Borcherds seconded, "That in Rule 6 the word 'five' be substituted for the word 'three,'" so as to raise the subscription to five guineas for life membership in future.—This was put and carried unanimously.

Mr. Meakin proposed, and Mr. Granville seconded, "That in Rule 7 the word 'four' be substituted for the word 'two,'" so that the subscription for life membership of the Club, but not of the Abernethian Society, be in future four guineas and a-half.—This was put and carried.

The meeting was then adjourned.

FINANCE COMMITTEE MEETING, Oct. 16, 1893.

The first meeting of the Finance Committee of the Amalgamated Clubs for the year 1893-4 was held at Dr. Shore's house on Monday, October 16, at 5.15 p.m. There were present—Dr. Shore (in the chair), Mr. Bowlby, Mr. Nimmo (Cricket), Mr. C. H. Hopkins (Association), Mr. Bond (Rugby), Mr. Hugo (Boxing), Mr. Waterhouse (Tennis), Mr. Borcherds (Journal), and Mr. H. B. Meakin (Secretary).

The minutes having been read and confirmed, the Treasurer (Mr. Bowlby) made a statement of the present

state of finances, and presented the accounts for the year 1892-93 drawn up for audit.—These showed that the total receipts for the year had been £497 2s. 6d., that the total expenditure had been £332 5s. 5d., leaving a balance to the credit of the maintenance and reserve fund of £164 17s. 1d.

It was agreed to ask Mr. Waring and Mr. Hopkins to act as Auditors.

Estimates of the expenses for the current year were presented by the representatives of the Rugby and Association Football and the Boxing Clubs, as follows:—Rugby, £45; Association, £45; Boxing, £28 8s. 3d. These were accepted and grants were made.

The Treasurer called attention to the great diminution in the work which would be required of the Clerk now the Amalgamation was fairly started, and proposed that the salary for the current year be £5.—This was seconded by Mr. Borcherds, and carried unanimously.

Mr. Borcherds drew attention to the inadequate supply of newspapers and periodicals in the smoking-room, and, after some discussion, it was proposed, seconded, and unanimously carried, "That the Secretary be requested to write a letter to the committee of the Abernethian Society calling their attention to the inadequate supply of daily and weekly papers and magazines in the smoking-room."

Several cheques were drawn and the meeting adjourned.

AMALGAMATED CLUBS.

Balance Sheet for the Year 1892-1893.

Cr.	£	s.	d.
By Members' Subscriptions as per subscription book	452	14	0
Subscription from Hospital staff	44	8	6
	£497	2	6

Dr.	£	s.	d.	£	s.	d.
To grants to Clubs.						
Rugby Football Club...	40	0	2			
Association Football Club	37	0	5			
Boxing	25	16	6			
Athletic	32	19	3			
Cricket...	11	15	0			
Swimming	7	5	8			
Lawn Tennis	4	4	11			
				159	1	11
To Abernethian Society, 125 members at £1 1 0				131	5	0
To excess subscription returned				1	11	6
To Reserve and Maintenance Fund				205	4	1
				£497	2	6

Audited and found correct,
October 20th, 1893.

H. J. Waring,
Chas. H. Hopkins.

MAINTENANCE AND RESERVE FUND.

Cr.	£	s.	d.
Funds as per General Account	205	4	1
	£205	4	1

Dr.	£	s.	d.
Stamps for cheques	0	8	4
Subscription to Hare and Hounds	3	3	0
Elliott and Fry (pictures)	1	18	0
Adlard (printing)	5	12	0
Wages of clerk	15	0	0
Illman (lockers)	7	9	0
Secretary's petty cash account	6	16	8
Balance to next account	164	17	1
	£205	4	1

Audited and found correct as per bank pass book,
October 20th, 1893.

H. J. Waring,
Chas. H. Hopkins.

On the Action of Chloroform and Ether on the Heart.

By John W. Pickering, D.Sc. (Lond.)

ALTHOUGH many brilliant scientific investigators have devoted much time and energy to the study of the action of anæsthetics on the heart, there are still many questions undecided, and the controversy between the rival schools of opinion shows no sign of abatement.

The following is a brief summary of the leading views on the action of chloroform on the heart:—

1. That chloroform may cause marked dilatation of either the auricles or ventricles, or of the whole heart, in a degree of anæsthesia in which the conjunctival reflex is not abolished.—(McWilliam, 1).

2. That cardiac dilatation when present is due to pulmonary obstruction.—(Lawrie, 2).

3. That chloroform paralyses the respiratory centre in the medulla oblongata, and that the consequent asphyxial condition of the blood acting in conjunction with the chloroform secondarily paralyses the heart.—(Brunton, 3).

4. That chloroform syncope is due to a reflex cardiac inhibition caused by an irritation of the nerve endings of the vagi in the lungs.—(Kirk, 4).

5. That the fall of blood pressure caused by the administration of chloroform is due primarily to a weakening of the heart's action and not to a paralysis of the vasomotor centre. —(Gaskell and Shore, 5).

Many of the difficulties of the problem are due to the presence of the nervous system of the animal undergoing experimentation.

Gaskell and Shore (op. cit.) have, by the establishment of a cross circulation between two animals, allowed the blood of an animal inhaling chloroform to circulate through the brain only and not through the heart of another animal, and by this method have studied the action of chloroform on the heart *viâ* the nervous system. Conversely, they have allowed the blood from an animal inhaling chloroform to circulate through the heart of the second animal without passing through its brain. They have concluded that chloroform has a powerful action on the heart itself.

But even in these experiments the intrinsic cardiac nervous mechanism remains intact, so that we have a possibility of the chloroform acting on the cardiac terminations of the vagi. I have attempted to eliminate this difficulty by experimenting on the hearts of embryos previous to the development of a functional nervous mechanism.

The chick-embryo between the 50th and 80th hour of incubation presents an accessible form of heart minus a nervous system.

Although at this period of development the embryonic circulation is very active, there can be no complications due to a change of blood pressure.

Also the factor of asphyxia is eliminated.

But it will be asked what evidence is there that the heart at so early a stage of its development is influenced by drugs in like manner to the adult heart?

I have tested this question with a comparatively large number of drugs, and the details of my experiments are recorded in my recent papers (6).

The embryonic heart under the influence of caffeine, digitalin, strophanthin, and veratrine behaves in a manner indistinguishable from the adult heart. The typical action of each of these drugs on the embryonic heart is so well marked that in dilute solutions they can be recognised by their physiological action alone.

There is, therefore, evidence that in the embryonic heart we possess a convenient means of determining whether a given drug acts directly on the heart or through the agency of a nervous mechanism.

With chloroform and ether I have obtained widely divergent results.

Thus in a 75 hour embryo kept under conditions which would allow its heart to keep an unchanged rhythm for 10 or 12 hours, one half a c.c. of a chloroform solution containing ·00003 c.c. of pure chloroform will if injected under the blastoderm of the embryo rapidly reduce the cardiac and produce an exaggerated diastole. After the injection of ·0004 of a c.c. of chloroform, the heart stopped in an extremely dilated condition, but the auricle gave a few twitches in response to mechanical or electrical stimulation.

Raising of the temperature of the embryo still in an atmosphere containing chloroform vapour will usually restore the cardiac rhythm.

Ether on the other hand acts as a powerful stimulant to the embryonic heart. Thus a heart whose action had been stopped by exposure to cold was restored by the injection of ·0033 of a c.c. of ether dissolved in 1 c.c. of normal saline.

It is only after comparatively enormous doses that ether can depress the cardiac rhythm of chick-embryos. It was pointed out by Dr. Ringer (7) that if a frog's heart had been stopped by chloroform the application of a 1 % solution of ammonium hydrate will restore the beats almost to their original power.

I have tested this antagonistic action on the embryonic heart and have found that in hearts stopped by extreme dilatation by chloroform, the application of ammonia will partially restore the rhythm.

Dr. Wood (8) of Philadelphia has attempted to antagonise the toxic action of chloroform on dogs' hearts. He failed to get any restoration of rhythm by the hypodermic injection of either atropine, amyl nitrite or caffeine, while alcohol only increased the cardiac depression.

Ammonia had slightly beneficial effects, and digitalis by the raising of the blood pressure often averted death.

Caffeine and atropine failed to restore the cardiac rhythm of the embryonic heart after a chloroform stoppage.

I have also not obtained marked results with digitalin, but on this point and on the action of strophanthin on chloroformed hearts I hope to make further experiments.

Possibly Wood's results with digitalin may be explained by the vaso-constrictor action of that substance.

Strychnine in doses of ·00002 grain increases both the force and frequency of the embryonic heart-rhythm. Larger doses prove very depressing.

Bearing in mind the stimulant action of strychnine on the respiratory centre, this primary cardiac augmentation renders this substance extremely valuable. It is, however, unable to restore embryonic hearts when the chloroform stoppage has lasted longer than three minutes.

In connection with chloroform stoppages it is important to note, that a mixture of carbonic dioxide and chloroform is far more toxic to the embryonic heart than pure chloroform.

In conclusion, I wish to emphasise two points:—

1. That chloroform and ether act in an essentially different manner on the embryonic heart; that chloroform has a depressor and ether an augmentor action on the contractile substance of the embryonic heart. Consequently the statement of Claude Bernard (9), recently reiterated, that chloroform and ether have an essentually similar physiological action, is open to doubt.

2. That it is desirable to continue the researches for a substance that shall antagonise the toxic action of chloroform.

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(2) Lawrie.—*Medical Chronicle*, Jan., 1891.

(3) Brunton.—"Hyderabad Chloroform Commission," Bombay, 1891.

(4) Kirk.—"A New Theory of Chloroform Syncope," Glasgow, 1892.

(5) Gaskell and Shore.—*British Medical Journal* (1893). Vol. I., p. 106.

(6) Pickering.—Proc. Royal Society. Vol. LII. (1892), p. 461. *Journal of Physiology*. Vol. XIV. (1893), p. 383.

(7) Ringer.—"Practitioner." Vol. XXVI. (1881), p. 436.

(8) Wood.—"International Medical Congress, Berlin, 1890." Bd. I., s. 133.

(9) Bernard.—"Leçons sur les Anæsthésiques et sur l'Asphyxia," Paris, 1875. P. 101.

Cases of Suspected Asiatic Cholera, with Tests.

The similarity of the symptoms and signs in the following cases to the book descriptions of Asiatic cholera is very close, and it was only in those cases where the tests 1, 2, 3 were applied and failed that Asiatic cholera was definitely negatived.

The treatment in each case is given as being of interest, especially the use of very hot tea infusion, to stop vomiting, and the injection of warm water per rectum to alleviate thirst, the latter of which is capable of extended use,—*e.g.*, after chloroform in surgical cases with severe hæmorrhage.

Case I. (Kindly furnished by Mr. H. A. Eccles, H.P.)

Henry Topp, *æt.* 24, printer, admitted on Sept. 8th, 1893, under the care of Dr. Gee.

History of Present Condition.

Sept. 7.—Went to work. In the evening drank six pints of beer, and ate some fried plaice, both of doubtful quality.

Sept. 8.—8 a.m.—Diarrhœa commenced. Bowels open 12 times previous to admission.
9.45 a.m.—Vomiting commenced.
10 a.m.—Cramps in legs commenced.
11.30 a.m.—Cramps in arms commenced.
12 noon.—Admitted.

Urine last passed on evening of Sept. 7th.

Previous History.—Subject to rheumatism. Rather heavy drinker. Never similar attack. No evidence of contact with cholera-infected persons.

Condition on Admission.—Extreme collapse, cheeks sunken, face livid, conjunctivæ not injected. Tongue dry, covered with brown fur. Speech husky. Mental condition unimpaired; much cyanosis of whole body. Heart and lungs natural. Pulse 130, almost imperceptible, but apparently regular. Temperature 96·2° in the axilla and 100·4° in the rectum. Respirations 18. The abdomen was retracted, but there was no tenderness, and no dulness in the hypogastric region. Extremities cold and cyanosed. Frequent cramps, causing severe pain in upper and lower extremities. No abdominal cramp. Stools watery, very light yellow in colour, containing no fæcal matter. Very offensive. Microscopical examination of stools showed numbers of bacteria, amongst which were a few comma bacilli. Suppression of urine, ℥iii. only being passed in 24 hours.

Progress.—Sept. 8.—Cramps less after hypodermic injection of morphia (gr. $\frac{1}{6}$). Vomited at 5.35 p.m. Vomit rice-water in character. Bowels open at 10.45 p.m. Rice-water stool. Urine contained albumen.

Sept. 9.—Restless at night. General condition much improved. Less cyanosis. Pulse 92, better volume and tension. B. O. 3. Rice-water stools. Urine ℥xiii. Contained trace of albumen. No vomiting.

Sept 10.—Bowels open twice, rice-water in character, but containing slight amount of fæcal matter. No cyanosis. Pulse 80. Resp. 20. Urine ℥xxxiij.

Sept. 11.—Rheumatic pains in shoulders. Semi-solid stool, light in colour. Urine contained trace of albumen.

Sept. 13.—Solid stool, light brown. Urine not albuminous.
,, 19.—Temperature normal. Convalescent.
,, 26.—Discharged cured.

Treatment.—I. Dietetic.

Sept. 8.—Whey ℥ii. every hour. Tea without milk or sugar.
,, 9.—Mutton essence, ℥ifs every 4 hours.
,, 10.—Calves-foot jelly. Whey ℥iii. every 1½ hours.
,, 12.—Milk ℥i. and whey ℥ii. every 2 hours.
,, 13.—Arrowroot.
—Milk ℥ii. and whey ℥ii. every 2 hours.
,, 14.—Milk ℥iv. and whey ℥i. every 3 hours.
—Bread-and-milk. Custard pudding.
,, 15.—DL. milk. Bread-and-butter, without crust.
,, 17.—Fish and mashed potatoes.
,, 18.—Minced chop or fish.
,, 19.—DD. Milk oi. extra.

II.—Medicinal.

Sept. 8.—Injectio morph. hypod. ♏ii.
,, 11.—Hst. sodii salicylatis (gr. xv. ad. ℥i.) 6tis. horis.
,, 19.—Enema saponis.

Case II.

Under the care of Dr. West, in the absence of Sir Dyce Duckworth. (Kindly furnished by Mr. Dunn, H.P.)

E—— E——, *æt.* 5, schoolboy.

Quite well up to 10 p.m. on September 14th; then suddenly seized with severe vomiting and diarrhœa. In 1½ hours B. O. 6-7 times. Motions loose and light coloured. Complained of abdominal pain. No cramps.

The only history of improper food was that the child had part of an apple about 6 p.m.

Sept. 15th.—On admission, 11.45 a.m., pale, dusky—complexion "earthy." Eyes sunken; lies with them half-closed. Conjunctivæ injected. Tongue clean and dry. Sordes on lips and teeth. Breath warm. Voice weak. Pulse small; only just felt at wrist. Respirations shallow and hurried. T. 97. abdomen rigid; no tenderness. Hands and feet dusky and cold. Skin dry. Extreme restlessness. No cramps. Little abdominal pain. Much thirst.

For the first four or five hours patient was very collapsed. His restlessness was extreme. Vomiting ceased about the end of an hour. Bowels acted about six times in the first 24 hours. Motions loose, light in colour, with white flakes, and extremely offensive. They acted again once on the fourth day, the motion then being natural. There were no cramps. Temp. subnormal after the first 24 hours; highest 99·6 at 3 a.m. on morning of ad-

mission. After 12 he began to steadily improve. Had suppression of urine for about 24 hours. Bacteriological examination negative result.

Treatment.—Patient was kept warm with hot bottles. As he was restless and would not keep his arms in bed, they were done up in wool. He was given hypodermic of morphia ♏ss. and brandy ♏xx. half-an-hour after admission, owing to his great collapse and restlessness, and morph. ♏$\frac{1}{2}$ was given again about 2$\frac{1}{2}$ hours later; this quieted him, and he got several snatches of sleep. Thirst was relieved by tea ℥j. every 15 minutes whilst awake. During afternoon and evening of 15th whey ℥ij., with some absolute alcohol was given every 15 minutes. Sept. 16th allowed bread-and-milk. Sept. 17th, ordinary diet. Stimulants discontinued.

Went home quite well on Sept. 20th.

Case III.

W—— N——, *æt.* 20, lighterman.

Sept. 13th.—Patient was admitted at 3.45 p.m. in a state of collapse from severe diarrhœa and vomiting.

History of Present Illness.—Quite well up to 12.30 p.m. to-day, then seized with griping pains in abdomen; these got rapidly worse, and diarrhœa and vomiting commenced. Patient then became so ill that he had to be taken off his barge at Blackfriars Bridge and brought to the Hospital. Motions are described as having been very loose, light yellow in colour, with white flakes suspended.

No history of having had any fruit, fish, or tinned meat.

On Admission.—Much collapsed, evidently in pain. Extremities bluish and cold. Face drawn, dusky and "earthy." Eyes sunken and half-closed; pupils dilated; conjunctivæ slightly injected. Tongue brown, dry, and furred; not cold. Sordes on lips. Pulse 108, scarcely felt at wrist. T. 97° in axilla. Breath warm. Abdomen retracted, muscles rigid. Fingers and toes cold, but not shrivelled. Severe cramps in soles of feet. Complains much of thirst. Has not passed any urine since 9 a.m.

Patient continued to have severe cramps for about 24 hours. At first had troublesome vomiting, but after about five hours this ceased. Had no diarrhœa. Bowels acted for first time on sixth day after admission. Suppression of urine for 48 hours. The first specimen contained about 1-6 alb.; no blood or bile.

There was extreme restlessness until the morphia began to act. Soon after admission patient showed signs of improvement, and at the end of the first day began to rapidly gain ground. He had no relapse, and was discharged cured on the tenth day.

Treatment consisted mainly in keeping the patient warm. The extreme restlessness was combated by morphia gr. ¼ on admission, and repeated again about ten hours later; this, also, no doubt stopped the diarrhœa. Friction was applied to relieve the cramps.

Hot strong tea (without milk or sugar) in small quantities, and given frequently, was tried in hopes of checking the vomiting, but, as this failed, patient was not allowed anything at all by the mouth for 24 hours, and the thirst was relieved by small rectal injections of warm water every two hours. When it was found that these were borne well, nutrient enemata were also given four-hourly. Subsequently whey (℥ij. every half-hour) was allowed, and this gradually increased. On the fourth day solid food was commenced (bread-and-milk), on the fifth minced chop, mashed potatoes, and pudding, and on the eighth full diet.

(Kindly presented by Mr. STUBBS, H.P.)

Dr. Ormerod had under his care, in Dr. Hensley's absence, the following cases during September, which, except as regards the recovery of both patients, were suspiciously like genuine Asiatic cholera, judging from book descriptions, and in the case of the boy J. E. F. from Dr. Klein's bacteriological investigation. In the case of T. S. the evacuations which were to have been brought to the Hospital were lost, so that microscopic evidence is wanting. The cases resembled each other in several points,—*e.g.*,

1. History of having eaten fish the day before onset.
2. Suddenness of onset.
3. The great collapse occurring with the vomiting and diarrhœa.
4. The temporary suppression of urine.
5. The occurrence of albuminuria after re-establishment of secretion.

Case IV.

J—— E—— F——, 11, admitted September 17, complaining of diarrhœa and vomiting. Was quite well till just after leaving church in afternoon, between 4 and 5 p.m., when he was seized quite suddenly in the street with pain in abdomen, vomiting, and diarrhœa. B. O. twice. On admission was very collapsed, face pinched and sallow, pulse not felt at wrist, eyes sunken, voice a mere whisper, was very thirsty, but vomited everything. B. O. immediately after admission. Motion watery, opalescent, with some light-coloured feculent sediment. Given hypodermic injection of morphia, ♏j. with ether ♏xxv., pulse soon became perceptible and vomiting ceased, and he went to sleep. He passed no urine for 30 hours after admission. He was ordered whey ℥ss. and brandy ♏ss. every 15 minutes, if awake; but he vomited, so was given half the quantity for eight hours, and then resumed the former quantity.

19th.—Given milk and whey, equal parts.

21st.—Bread-and-milk. Bowels open to-day.

23rd.—Fish or minced chop.

On the evening before admission he had eaten some fish, some of which made his brother sick at once. His temp. was 99·6 on admission; subnormal all the rest of the time. Recovery was slow.

Case V.

T—— S——, 26, admitted Sept. 18th, 1893. On admission complained of vomiting, diarrhœa, and cramps. Was quite well till 1 a.m., when he woke up with pains in abdomen, vomiting, and diarrhœa. Cramps in feet and legs began after about ten minutes. Diarrhœa lasted thirteen hours. Motions, "rice-water."

On admission looked pinched; eyes sunken. Was very restless.

Was given morphia ♏ii.ss. and ether ♏xxv. at once, but remained restless and retched frequently. Mustard poultice to epigastrium relieved the retching, and a further hypodermic injection of morphia gave him some sleep. Was given whey ℥ss., brandy ♏xv. every half-hour. After ten hours same quantity given every quarter-hour.

19th, in evening, ordered milk and whey, *āā. ad lib.*

20th, bread-and-butter and pudding.

21st, bowels open to-day; motion natural in appearance.

For the two previous days his meals were as follow:—

	16th.	17th.
Breakfast ...	Bloater ...	Eggs and bacon.
Midday ...	Whelks ...	Hot roast pickled pork.
Tea ...	Eggs and bacon	Winkles.
Supper ...	... ...	Cold pork and greens.

Temp. on admission 99·2; afterwards subnormal. Convalescence was rapid.

He passed no urine for more than 24 hours after admission.

Cholera Tests as used by Dr. Klein, and which do not Fail if the Comma Bacillis is Present.

1. *Examination of Fresh Stools or Contents of Ilium.*—If flakes in the stool, ascertain whether they are composed of shed epithelium or of lymph corpuscles; the former is the rule in Asiatic cholera. Notice whether there are any motile bacilli, which in shape are commas or spirils; their movements are not straight, but like a screw moving.

2. *Examination of Stained Specimens.*—Make film specimens on cover glasses; dry and stain in alcoholic gentian-violet; search for comma-shaped or spiril bacilli. In typical rapidly-fatal cases of true Asiatic cholera they occur in flakes in great crowds, and generally in linear arrangement; in some places almost to the exclusion of other bacteria.

3. Inoculate, with a trace of the flakes, tubes containing peptone (1 p.c.), salt (0·5 p.c.) in water, all previously sterilized. After six hours', better after 10 or 12 hours', incubation at 37°C., there is distinct, though slight, turbidity, due to the multiplication of choleraic comma bacilli. Take off from the top layers a loop-full, and make with this inoculations of a peptone tube, and from this dilution make cultivations in other peptone tubes, and on the surface of agar. After 24 hours pure cultivations of the choleraic comma bacilli are thus easily obtained.

The peptone cultivations if pure, or nearly so, give, on the addition of one or two drops of pure sulphuric acid, a characteristic rose-pink coloration, due to nitrates and indol.

This reaction is shown after 10-16 hours' incubation of the peptone cultures at 37°C.

4. Gelatine plate cultivations are made with a particle of the flakes; after two or three days the characteristic colonies of the choleraic comma bacilli will be found, if the case is Cholera Asiatica. But this latter method, besides taking more time, is only successful if the flakes or stool originally contain a fair number of comma bacilli.

The Abernethian Society.

ON October 12th Mr. Henry Power, F.R.C.S., delivered the Introductory Address to the Society. It had been hoped that a verbatim report of the address would appear elsewhere in these columns, but unfortunately the manuscript has been mislaid, and, at present, does not seem likely to be forthcom-

ing. The subject of the address was "Observation." It was highly appreciated by all present, and was received with great enthusiasm. A vote of thanks, proposed by Dr. Shore, and seconded by Mr. Reginald Brown, President, was carried with acclamation. There were present 112 members, the Matron, several Sisters, and rather more than 100 of the nursing staff. After the lecture, the company adjourned to the Library, where tea and coffee were served. The Museum, with the specimens added during the year, was then visited, as well as the Practical Class Room, where microscopic specimens were on view.

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On October 19th, Mr. Maidlow read a paper before the Society on "Electrical Department cases." These he divided into (1) Paralyses, (2) Painful Affections, *e.g.*, Sciatica and Neuralgia, (3) Tinnitus aurium, (4) Tumour, (5) Bladder cases, including Stricture of Urethra, Nocturnal Incontinence and Cystoscopic, (6) Suspended Animation due to chloroform, and (7) Medico-legal points of interest. He defined the terms "central" and "peripheral" as applied to paralysis, and discussed the value, from a diagnostic point of view, of the presence or absence of RD. He was convinced of the frequent presence of ankle clonus, increased knee-jerks and great rigidity in cases of functional paralysis; much wasting, he considered, was rare, and incontinence of urine and fæces almost unknown. A certain number of cases of Sciatica, when not immediately referable to constitutional defects, were, he thought, associated with osteo-arthritis of the hip-joint, and were due to pressure of the osteophytes around the acetabulum or tuber ischii. He then enumerated the causes of Tinnitus Aurium, and, under the head of Tumours, discussed the treatment by electricity, of Nævi, Fibroids and some cases of fungating Scirrhus of the breast. He had found Galvanism exceedingly useful in cases of nocturnal incontinence of urine in children, when all reflex causes were excluded and Belladonna had had a good trial. In dealing with cases of suspended animation stress was laid on the necessity for avoiding the cardiac region. In medico-legal questions, he thought, RD might be useful; its absence would prove nothing, whilst its presence would show undoubted paralysis. Muscles retain their irritability for four or five hours after death, and hence the diagnosis between Trance, Lethargy and Death might be made. He took this opportunity of thanking Dr. Lewis Jones for his many suggestions, of which he (Mr. Maidlow) had availed himself.

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On October 26th, Mr. Hoyle brought before the Society the notes of a case, the diagnosis of which lay between Rötheln, Scarlet Fever and an early rash in Secondary Syphilis, after which, the President called upon Dr. Collins to read his paper on "Some Medical Work on the L.C.C."

Dr. Collins stated that this was the ninth occasion on which he had had the pleasure of addressing the Society, and that this evening he was about to limit himself entirely to the medical aspect of the L.C.C., altogether avoiding the political. He considered that this spot of all others was essentially suitable to a paper on such a subject, for had not Pye Corner, in its association with the Great Fire of London, produced the most drastic reform in Sanitary Science?

He discussed the work done by the Public Control Committee, for it was in this department that he had chiefly been engaged as yet. This Committee, he pointed out, dealt with the insurance of infant life, with the gas and lighting of London, with the regulations dealing with weights and measures, with the regulation of shop hours, and with the calling of, and conducting inquests, &c. He next briefly narrated the history of the Coroner's Court, and traced the law of fees of Medical Officers at public institutions to the days and deeds of Burke and Hare. He dealt in a few words with the building of Mortuaries, their style of architecture, which, he recommended, should be of a semi-ecclesiastical nature, and the need for a greater number.

By far the greater number of deaths due to fire in London was referable to lamp accidents, and of these comparatively few were due to the explosion of lamps, whilst the great majority were owing to the breaking of a lamp when upset; he handed round a printed form issued by the L.C.C., with suggestions to reduce this cause to a minimum. In his opinion the Infant Life Protection Act was very limited.

He next discussed at some length "The Contagious Diseases of Animals Act," and enumerated the diseases dealt with by this Act, the commonest of which in London was glanders; he detailed the suggestions made to the Board of Agriculture to diminish the spread of glanders, and entered on the diagnosis and pathology of the disease.

The plan of the main drainage of London was described, and the method of dealing with sewerage was briefly referred to; reference was also made to the sanitary condition of the Regent's Grand Canal. In dealing with the Public Health Council, Dr. Collins stated that the epidemic of enteric fever in the south of London in 1891, was traced to the selling of ice-creams by Italians; that the scarlet fever epidemic was probably due to the supply of milk, though the Council had no power, legally, to deal with the question, unless it could be absolutely proved which of the cows it was that had been the source of infection.

In the five Metropolitan lunatic asylums there were at the present moment 10,000 lunatics; he referred to the necessity of investigating the causes of lunacy, and stated that a pathologist would be appointed to the new asylum, the plans of the laboratories of which he handed round.

There were present 46 members and three visitors, amongst the latter being Mr. Cross, the Clerk to the Hospital, whose eulogies on his political opponent were greatly applauded.

R. C. J. S.

St. Bartholomew's Hospital Musical Society.

ON Wednesday, November 1st, 1893, the Annual General Meeting of the Musical Society was held in the Inquest Room at 4 p.m. Dr. Champneys in the Chair. Amongst those present were Dr. West, Dr. Dundas Grant, Dr. Andrewes, Dr. H. Morley Fletcher, Mr. E. H. E. Stack, Mr. E. P. White, and others.

Mr. Thomas Smith, F.R.C.S., was elected President, Dr. Dundas Grant was appointed Conductor, both for vocal and orchestral practice and concerts; Dr. Fletcher, Treasurer, and Mr. A. G. Haydon was elected General Secretary. Mr. Bumsted was made Orchestral Librarian, and Mr. Crossman, Choral Librarian. A representative Committee was appointed. It was resolved that the Secretary send a report of all the entertainments given by the Society both in the Hospital and elsewhere to the Editor of the Journal.

The accounts for the past year were read and passed.

The following probable fixtures have been made:—

1. An entertainment in connection with the Conversazione of the British Nurses Association at St. George's Hall, in the first week in December.

2. A Concert to be given in the Library (subject to permission from the School), to which the Matron and Nursing Staff will be invited, sometime during the Winter Session.

3. The Musical part of the usual Christmas entertainment, early in January.

St. Bartholomew's Hospital Smoking Concert Club.

THIS Club gave its first winter concert at St. James's Restaurant on Saturday, October 28th. Owing, no doubt, to the many counter attractions, the attendance was not so large as might have been desired.

Proceedings commenced at 8.30 p.m.; the first item, of a very interesting programme, being a well-executed pianoforte solo by Mr. F. S. Newcombe; followed by Mr. N. B. Baker, who gave "To-morrow will be Friday" in his well-known style. The comic element, as represented by the Hospital, was admirably sustained by Mr. F. W. Gale with "The accent on." There was no denying the encore, "A rapid diagnosis." Mr. C. H. Clark next gave a recitation, "The Revenge," proving himself to be a no mean master of the art. Too much praise cannot be awarded to Mr. R. G. Wallett, who as a banjoist and comic singer is practically unassailable; this was well proved by the enthusiastic reception he received. Some clever banjo songs were rendered by Mr. W. Wyllys, and were deservedly encored. The "River of years," by Mr. Wade, and "Polly," by Mr. Coulter met with applause. Mention must also be made of pianoforte selections by Mr. D. St. Cyr. The concert terminated at 11.30 p.m. with "Auld lang syne" and "God save the Queen."

In the regrettable absence of Mr. Reginald Brown the duties of the chair were admirably carried out by Mr. P. J. Furnival. Amongst gentlemen present were noticed Mr. Marsh and Mr. Jessop, who by their presence and geniality added materially to the success of the evening.

The next concert takes place at St. James's Restaurant on December 2nd, when it is hoped that the attendance will be larger. Gentlemen who have not already joined this excellent club are invited to do so, and give in their names to the secretaries.

BOHEMIAN.

Club News.

BEFORE going into the details of the doings of the clubs, we would offer a welcome to the fresh men who have joined us this year, and—if they will pardon us — will add a word of advice to them.

Every year there are a number of men who come to us from schools where they have taken an active share in athletics, but who on joining the Hospital cease to identify themselves with games of any sort. The ease and rapidity with which they have been able to exchange the class-room for the football field at school, contrasts with the necessary intervention in London of a railway journey; or perhaps, they think that during their five years at the Hospital they will have a great deal of work to do, and on this account hardly like to "waste" much time on games.

Whichever of these causes operates in individual cases, we would point out to them that it is only at first that one notices the irksomeness of the railway journey, and we would further point out to them that short as the five years' course seems for the work to be done in it, it is yet a long course as regards their health; they will learn too late that the Hygiene of London "diggings" and the dissecting-room is not the Hygiene of a public school; and if to the already great disadvantages of London life they add the disadvantage of diminished exercise, in a word, if they do not make a point of determinately maintaining the regularity of their exercise, they will inevitably find that their general health, and, as a necessary result, the quality of their work, is undergoing a serious change for the worse. To a still greater extent will they find this to be the case when they begin in two years' time to do their appointments, when the advantages of being able, at least once a week, to exchange the atmosphere of the Wards or the Surgery for that of the football or cricket-field are well-nigh incalculable.

Lastly, we have it on the authority of many an old student, how great is the pleasure, in after-life, of looking at the photo of a Cup-team on the walls of one's study, and letting

it recall to one's mind the countless incidents in connection with its matches, its journeys to the provincial towns, and indeed in connection with every face which it includes.

THE ASSOCIATION FOOTBALL CLUB.

OFFICERS FOR SEASON 1893-94.

President.—W. H. Jessop, Esq., F.R.C.S.

Captain 1st XI.	*Captain 2nd XI.*
G. R. Fox.	E. Folliott.

Vice-Captain.—T. F. Fernie.

Honorary Secretaries.

C. H. Hopkins. R. P. Brown.

Hon. Treasurer.—W. Wyllys.

Committee.

J. S. Mackintosh.	R. Waterhouse.
E. H. Fyrer.	H. Pickering.
W. K. Hopkins.	E. W. Woodbridge.
C. H. G. Prance.	N. H. Joy.

So far the team has played four matches, of which number they have won two and lost one; the fourth match, *i.e.*, the Cup-tie v. the City Ramblers, was stopped by the referee on account of darkness, four minutes before "time," despite the fact that Bart's were leading by two goals to none. Appended are the details of the matches :—

Oct. 7th, *v.* Barnes, won by 1 goal to *nil.*

Oct. 14th, *v.* Minerva, lost by 3 goals to *nil.*

Oct. 20th, *v.* City Ramblers (Cup Tie), unfinished, Bart's leading by 2 goals to *nil.*

Nov. 1st, *v.* Sittingbourne, won by 1 goal to *nil.*

The 2nd XI. has won three out of its four matches.

Oct. 14th, *v.* Ilford Reserves, lost by 3 goals to 2.

Oct. 18th, *v.* Felstead School, won by 5 goals to 1.

Oct. 28th, *v.* Civil Service, won by 3 goals to 1.

Nov. 1st, *v.* Ealing, won by 1 goal to *nil.*

RUGBY FOOTBALL CLUB.

OFFICERS FOR SEASON 1893-94.

President—A. A. Bowlby, Esq., F.R.C.S.

Vice-Presidents.

A. N. Weir,	H. B. Meakin.
G. G. Oakley.	S. P. Cornish.

Captain 1st XV.	*Captain 2nd XV.*
T. E. G. Calverley.	T. Chave.

Committee.

J. W. W. Stephens.	L. Beath.
T. Martin.	P. Andrew.
J. C. S. Dunn.	H. M. Cruddas.

Honorary Secretaries.

H. Bond. A. E. Hodgkins.

The Rugby Club have been less fortunate than the Association. Their first XV. has played five matches, in which they have scored one "win," against four losses. The second XV. has a better record, for out of four matches they have won two.

1ST XV. MATCHES.

Oct. 7th *v.* Civil Service, lost by one try to *nil.*

Oct. 14th *v.* Sandhurst, lost by 2 goals 3 tries to *nil.*

Oct. 21st *v.* Bedford, lost by 2 goals 2 tries to *nil.*

Oct. 28th *v.* Croydon, lost by 1 goal 3 tries to *nil.*

Nov. 1st *v.* Engineering College, Folkestone, won by 1 goal and 3 tries to 1 try.

2ND XV. MATCHES.

Oct. 11th *v.* King's College A, won by 1 try to *nil.*

Oct. 14th *v.* Middlesex Wanderers II., lost by 3 tries to *nil.*

Oct. 21st *v.* Civil Service II., won by 1 goal 1 try to 1 try.

Oct. 28th *v.* Hong Kong and Shanghai Bank, lost by 3 goals and 5 tries to nil.

THE BOXING CLUB.

Owing to a singular reticence on the part of the officers of the Boxing Club, we have been unable to gain any information with regard to its doings.

Notes.

DR. W. J. RUSSELL, F.R.S., has accepted the invitation of the Royal College of Physicians to act as Examiner in Chemistry in the place of the late Mr. Heaton.

* * *

MR. H. J. M. WATTS, late H.S. to Mr. Morrant Baker, also late assistant chloroformist to the Hospital, has been in charge of the Grimsby Cholera Hospital, and has been successful in the intravenous injection of normal saline solutions in the treatment of cases under his charge.

* * *

Mr. F. C. Wallis, F.R.C.S. (Eng.), late assistant demonstrator in anatomy, has been appointed assistant surgeon to Charing Cross Hospital.

* * *

J. RIVERS-RIVERS, M.D. (Lond.), M.R.C.P., late H.P. to Dr. Gee, has been appointed lecturer in Psychological Medicine to the University of Cambridge, and fellow-commoner to St. John's College.

* * *

J. H. DRYSDALE, M.B. (Cantab), M.R.C.P., late H.P. to Dr. Andrew, has been appointed lecturer in Bacteriology to the Liverpool University College in succession to Dr. Kanthack.

* * *

WE regret to announce that B. C. Green, who has in the past done so much for our athletics, is obliged to go to Australia on account of ill-health.

* * *

IT may not be generally known that on October 17th, 1850, Dr. Elizabeth Blackwell, now residing at Hastings, was admitted as a student of St. Bartholomew's Hospital with the consent of the treasurer, the warden, and school authorities. She attended for some time in the wards of the Hospital, spending several hours daily accompanying the physicians and surgeons in their visits. She attended Sir James (then Mr.) Paget's lectures on pathology, and the clinical lectures of the late Sir George (then Dr.) Burrows, of Dr. Kirkes, and of Dr. Baly. We have much pleasure in recalling these events, for the far-seeing and generous justice of thus admitting a lady to the practice of the Hospital, before the existence of the London School of Medicine for Women, was in its time an act greatly to the credit of the authorities of the Hospital and School.

Dr. A. A. Kanthack has been taking a class for the Final M.B. (Lond.) on the pathology of diabetes, uræmia, myxodœma, and other subjects, chiefly those not to be found in text books, and which are based on experimental pathology. A similar course will be given later on for the Final M.B. Part II. (Cantab.)

* * *

In November Dr. Kanthack will begin a course of practical instruction in Elementary Bacteriology, which will be held on Monday, Tuesday, and Wednesday afternoons for four or five weeks. A similar course will be given in January next, and those who wish to attend then should apply at once, so as to enable days to be arranged. The syllabus will be announced later. Fee, £3 3s. od., to be paid to the Warden. These classes are open to qualified men only.

* * *

The small practical class-room, which is to be temporarily used as the Pathological Laboratory, has been greatly improved by the setting up of several tables for the purposes of experimental work, and new apparatus and other appliances have been added so as to make it most efficient and replete for the carrying on of bacteriological and microscopical work.

* * *

The following gentlemen, who, having passed in all the subject of the final conjoint examination, have now received their diplomas of M.R.C.S. and L.R.C.P., viz :—Mr. H. T. M. Whitling, Mr. P. E. Turner, Mr. E. S. Humphrey, Mr. R. Ballard, Mr. L. Feaver, Mr. R. H. Wilkin, Mr. W. G. Richards, Mr. B. Collyer, Mr. J. S. E. Selby, Mr. E. W. Cross, Mr. J. D. Rawlings, Mr. R. O'Leary, Mr. L. J. Godson, Mr. H. B. Maingay, Mr. S. E. Gill, Mr. C. K. Crowther, Mr. C. Corben, Mr. W. Royden, Mr. A. L. Reed, Mr. H. N. Hobart, Mr. A. E. M. Smith.

* * *

The Gresham University Commission resumed their deliberations on Oct. 26th, when we understand that the terms of the draft-report were under consideration. We hear rumours of wide differences of opinion amongst the members of the Commission, and are curious as what the report will be.

* * *

We understand that on Saturday, October 28th, a special meeting of the Staff was held in the Library, at which the Scholars and Prize-students of the past year were present, and received certificates from Mr. Henry Power, who occupied the chair. It is, we think, a great pity that the students generally are not allowed to be present with their friends to witness what would be to all, both scholars and others alike, a very interesting ceremony. We do not wish it to be made a public meeting, like the prize distribution of a school, but if cards of invitation were sent to all students, and they were allowed to bring one or two friends each on applying for tickets, we think the annual meeting for the award of scholarships would be looked forward to with interest by the whole body of students.

Abstract of Introductory Lecture in Biology.

October 2nd, 1893.

THE word Biology is derived from the Greek βιος, life, λογος, a discourse; and therefore, in its widest meaning, Biology is the science which treats of the phenomena of life and of living things. In this wide meaning it would include not only what is to be dealt with in this course of lectures, but also the whole of Anatomy, Physiology, and Pathology. It is not in this wide sense that Biology is to be understood for our present purposes. For convenience, we may divide Biology into Botany, treating of the phenomena of the life of plants, and Zoology, dealing with those of the life of animals. But it must be understood that this division is one of convenience, and it is not intended to imply that there is any fundamental difference in the *general* phenomena of life in the two classes of living things. Whether we are dealing with an animal or a plant, the method of study and the general properties are the same. We may regard a plant or an animal from several distinct points of view, and what we learn by these different methods of investigation forms the subject-matter of the various divisions of Biological Science. In the first place, we may study the external form and the internal structure of living thing, disregarding other matters about it. What we learn in this way is called the *morphology* of the plant or animal. But a study of these points alone would give us but a very imperfect idea of what a living thing really is. All living beings are active, their activity being more or less obvious. By these activities living things may produce profound changes in surrounding objects, and, again, living things are greatly modified by external circumstances. The activities which living things exhibit may be called their *functions*. The matters learnt by investigating these functions constitute what we call *physiology*. We may, again, enquire how it is? why it is? and by the agency of what causes? a living being has a particular structure or manifests particular activities; and enquiries of this kind present many problems, only at present partially or imperfectly solved, that are of profound interest, and the proper understanding of which have far-reaching results in connection with the whole of medical study. All these problems we include in the division of Biology, called *ætiology*. There are, of course, other aspects from which we may view a living being, but in these lectures we wish only to deal with the general outlines of the phenomena of life, described under the head of the morphology, physiology and ætiology of a few types of life selected to illustrate the broad general principles.

Morphology will form the greater part of our studies. Everything we can learn by the naked-eye examination of a plant or animal, aided by dissection only, we call its *anatomy*. But we shall pursue the examination into the structure of some of our types further, calling in the aid of special methods of preparation and the assistance of our

microscopes. For convenience, we call this part of morphology the *histology* of our type. You will soon learn that an important property of living things is their power of growth from some simpler state; all animals and plants pass through various phases of development—their morphology is not the same at all stages of life. The study of these stages we describe as *embryology*. We shall have to study, later on, the broad general outlines of the development of an animal, and you will learn that a proper appreciation of many points of anatomy is intimately associated with a correct knowledge of development.

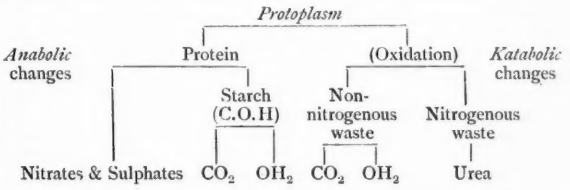
This, then, is the general scope of our subject, as it will be treated in this course of lectures. Perhaps, now, the first enquiry you would be disposed to make is, What is life? This is, unfortunately, the last question we are able to answer. We only know life by studying its effects. We have no knowledge of what it *really* is. We can only say that the objects which we call "living" present certain properties, in which they differ from all non-living things. All living things—whether vegetable or animal—are composed of a peculiar kind of matter, different from all other forms of matter. This living matter we call *protoplasm*.

Protoplasm is a solid or semi-solid substance, having the following characteristics:—

(1.) It has a definite chemical composition, viz.:—varying proportions of a peculiar substance which we may call *protein*, and of water. Protein or albumen contains, as shown by analysis, the elements of carbon, hydrogen, nitrogen, oxygen and sulphur in *about* the proportions per cent.:—C, 52; H, 8; N, 16; O, 22; S, 2. Protein is a constant constituent of all living things.

(2.) It is continually undergoing change, and this consists of two opposite processes. First, protoplasm has the power of adding to itself, *i.e.*, of manufacturing new living material, which it takes into itself, and intimately incorporates with itself. It is able to seize upon comparatively simple, non-living materials and to build them up into new protoplasm. This power is manifested in the highest degree by green plants, which can decompose carbonic acid gas and cause the carbon to unite with the elements of water, to form substances like starch, which, though nothing like so complex as protein, is a much more complex substance than CO_2 and OH_2. Further, a green plant is able to take nitrogen from a simple inorganic nitrate such as potassium nitrate, and sulphur from an inorganic sulphate, and to combine them with the carbon, oxygen and hydrogen contained in starch in such a way as to make new protein. This building-up power is possessed by all living substance, though not always to the same degree. Just as constantly there is taking place a process of destruction or waste, protoplasm being continually undergoing oxidation. In this way it becomes split up into more simple non-living substances, which ultimately are cast off from it in a highly oxidised and simple form. The ultimate products of waste are CO_2, OH_2, and a nitrogenous substance called *urea*.

All these changes are what we call *metabolism*, the building-up process is anabolism, and the destructive process is katabolism. The whole may be broadly represented thus:—



(3.) All living matter possesses the power of *growth*. It is obvious that this occurs when anabolism exceeds waste. Growth takes place in a peculiar manner. The newly-formed material is not merely deposited on that previously present, but is taken up into it, incorporated with it, so that the particles of the new are, as it were, interpolated amongst those of the old. This is called growth by *intussusception*.

(4.) Living things go through changes spread over longer or shorter periods of time, and these follow each other in a definite cycle. All living animals and plants originate from some pre-existing animal or plant. After separation in this way from the parent, they develop or grow until they assume the form and structure of the parent. Then they in their turn reproduce new independent organisms. Finally they die, and the substance composing them is resolved into simpler bodies.

The exact cycle of changes varies in different cases, and forms the *life history* of the organism.

(5.) Living matter can only exist under certain external conditions. These conditions are alterable within certain limits, but if these limits are exceeded life becomes extinct. Broadly, these conditions are:—(*a*) *temperature*. There is for every organism a minimum and a maximum limit of temperature consistent with life, and in most cases an *optimum* temperature between these limits can be discovered. (*b*) *moisture*. A proper supply of water is necessary to life. (*c*) *a supply of food*, in a suitable condition to be utilised for the construction of new material to supply the place of the constant waste which is going on. In this respect there is some variation; a plant can live on simpler food substances than an animal, and a green plant on simpler food than a colourless plant like a fungus. Thus plants have greater constructive power than animals. The following table shows this:

		Nature of food.
Plants.	green:	CO_2, OH_2, nitrates, sulphates, &c.
	colourless:	*Organic bodies.* Containing carbon like sugar, with organic bodies containing nitrogen.
Animals		Ready formed *protein*.

(6.) All living matter has a definite *structure*. Living beings can be resolved by the aid of our microscopes into a number of more or less similar ultimate units. These are the "morphological units," generally called "cells." The

structure of these units is in broad terms the same in all cases. The "cell" is composed of a soft jelly-like mass of substance called its *protoplasm;* within this is a more solid kernel or *nucleus*, and in it may be found one or more *nucleoli.* Around the protoplasm there is found, in the case of the vegetable "unit," a thick outer wall which is non-living, which has been produced by the protoplasm, and is composed of cellulose. This is the "cell-wall." The simplest animals and plants are composed of only one unit, more complex ones of several, and the highest are built up of immense numbers of units.

T. W. S.

Extracts from a New Dictionary.

By our Comical Correspondent.

Want of space prevents our publishing more than one or two extracts from "A New Dictionary."—[Editor.]

* * * * * *

Clinical Clerk is a gentleman, the chief of whose duties consists in copying out the House Physician's note on a case, and after having sprinkled a few "and's" "the's" and other oratorical effects among them, he reads them out to the Visiting Physician, who cleverly simulates an interest in the performance. We give a short account of a Clinical Clerk's trial trip in order to show up the pitfalls which await the unwary.

Scene: Arethusa Ward.

Time: 1.45 p.m.

(Enter Dr. Kino, followed by his H.P. and eight new Clerks bristling with stethoscopes.)

Dr. Kino deposits his hat upon a letter which Sister Arethusa had been writing and had omitted to blot, and goes to bed (I).

Dr. Kino (looking round): Ah! Who is taking care of this case?

New Clerk (endeavouring unsuccessfully to appear at ease): I am, sir.

Dr. Kino: Let me see, I forget your name for the moment.

New Clerk: Robinson, sir.

Dr. Kino: Oh! ah. Yes—well—er—er—Smith, how is the bronchophony?

New Clerk (who has never heard of it before, but does not wish to appear ignorant): She does not complain of it now, sir.

Dr. Kino (with surprise): Indeed! (Listens.) (*To patient):* Say ninety-nine.

Patient: Nointy-noine.

Dr. Kino (to New Clerk): Would you mind just listening here?

(*New Clerk* listens and tries to call to mind some of the terms he has heard used in connection with the chest.)

Dr. Kino: Well! what do you hear?

New Clerk: I fancy that I noticed a syllabus, sir; but I was not quite sure.

Dr. Kino (appearing amused): Well, never mind; you will get more used to it soon. Have you got a note?

New Clerk: Yes, sir.

Dr. Kino: Well, let's have it, then.

New Clerk (producing a book about the size of Quain's Anatomy Plates—reads): Sleeps well, takes well, pulse good, temp. normal.

Dr. Kino: Is that all?

New Clerk: Yes, sir.

Dr. Kino: Not a very elaborate note, is it? (Laughs.)

New Clerk (wishing to conciliate the great man, laughs immediately): Ha! ha!! ha!!!

Dr. Kino: What on earth is the matter?

New Clerk (trying to make it appear that he was only coughing): Nothing, sir.

Dr. Kino: Humph! (To *H.P.*) Do you think that the arsenic is doing her any good, Morrison?

H. P.: No, sir! I don't think that it is.

Dr. Kino: Well, suppose we give her something else. (Hands blue board to *New Clerk.*) Will you give her, please—Dimethyloxychinolin two drachms.

New Clerk (making a plunge for it, writes): Oxy-hydrogen crinoline, Oiss.

Dr. Kino (looking over his shoulder): I am afraid that is not quite correct, and I said one drachm—not a pint and a-half (corrects and hands board back—continues).

Extracti cocæ liq. two ounces.
Codeinæ six grains.
Glycerini et aquæ ad four ounces.

(To Clerk) Have you got that down?

New Clerk (who has got down nothing bearing the remotest resemblance to these drugs): Yes, sir.

Dr. Kino (continuing): Fiat mistura, cujus capiat cochleareum unum minimum ex cyatho vinario aquae quater in die post cibos. (Seeing that Clerk is helpless) Why don't you write it down?

New Clerk (who is not in the habit of conversing in the Latin language): I am afraid that I did not quite follow you, sir.

Dr. Kino (kindly): Well, never mind—bit strange at first, I suppose (takes board). I will write it for you. (To Sister) Will you give me another paper, please, Sister? I am afraid that the dispensers, being ignorant persons, might possibly be misled by Mr. ———'s hieroglyphics. (To New Clerk) Have you tested the urine?

New Clerk (who had dipped a piece of litmus paper in the glass and gone off to lunch): Yes, sir.

Dr. Kino: Any albumen?

New Clerk: It was rather uncertain, sir.

Dr. Kino (going to window, takes test tube and boils a sample of urine, which instantly solidifies. To *New Clerk*): Did you boil it?

New Clerk: No, sir—I only applied the guaiacum test.

Dr. Kino: Well, that was an unfortunate selection, as it does not happen to be a test for albumen. (Clerks laugh.)

(Dr. Kino goes to the next bed while the New Clerk retires in the background to remove the perspiration from his forehead.)

Correspondence.

VOLUNTEER MEDICAL STAFF CORPS.

DEAR SIR,—We venture to ask you for a little of your valuable space, as we desire to call the attention of the students of this Hospital to the fact that No. 3 Company of the Volunteer Medical Staff Corps is recruited solely from the men of St. Thomas' and St. Bart's. It is very much to be regretted that more students at this Hospital do not take advantage of this useful and patriotic recreation.

It is a well-known fact that there is a great deal of misunderstanding in the minds of the students concerning the expenses that would be incurred, and the time that would be occupied by joining. We are told by some that they cannot afford the time, and by others that it is too expensive. This is quite a mistaken idea.

The drills are arranged so as not to interfere with any of the work of first or second year's men. All the drills, except a few company ones, which take place in Charterhouse Square, three minutes' walk from the Hospital, can be put in at the Royal Victoria Hospital, Netley, at Easter, and at Aldershot during the August Bank Holiday week.

These outings are most enjoyable: we come into contact with students from eight other metropolitan schools, and our common life in camp promotes good fellowship among the London medical students, and friendships are formed that might never otherwise have been. The Scotch Universities also send their contingents.

With regard to expense. One almost saves money by joining. The entrance fee is ten shillings, and the annual subscription the same. Uniform and accoutrements are provided by the Corps.

There are no expenses whatever incurred at the Aldershot camp; free return tickets from London are given, and the food supplied and the care taken of men is quite above censure. A week's holiday taken in any other way would cost more than the entrance fee and annual subscription together.

At Netley something less than four shillings is charged for the return railway fare from London; there are *no* other expenses connected with this. There we are provided with beds in the wards of the Royal Victoria Hospital, and besides the ordinary drills we are instructed in ward duty.

The Conjoint Board gives special early *vivâ-voce* exams. to the Volunteers who want to go to Netley at Easter, or Aldershot in August.

The training obtained in the Corps is invaluable to men who intend joining the Army Medical Staff or the Indian Medical Service; in some cases members of the Corps have been exempted from their preliminary training at Aldershot, being reckoned efficient by the military authorities.

On Saturday afternoons the Corps often parades. We have recently been to Barnes Common, Bushey Park, Hampstead Heath, Harrow, Rickmansworth, and Wimbledon Common. These marches combine both healthy exercise and pleasure.

The Corps pays the railway fare and provides rations when we parade at any distance from town.

We have been called out to form dressing stations in the streets on such occasions as the visit of the German Emperor to the city, the opening of the Imperial Institute by H.M. the Queen, and at the recent Royal Wedding. Attendance is, of course, optional, but there is no better way of seeing these processions, as our duty lies along the line of route.

Our headquarters have lately been removed to Calthorpe Street, ten minutes' walk from the Hospital, and when finished they will possess many of the advantages of a Club.

We shall be very pleased to give any further information to anyone desiring it, or to take any fellow-students down to the headquarters. The present, we may mention, is the most opportune time for joining, being the commencement of a new Volunteer year.

Thanking you in anticipation for inserting this letter, we remain,

Your obedient servants,

H. G. M'KINNEY.
A. GRANVILLE.

St. Bartholomew's Hospital,
October, 1893.

Announcements.

OPERATION DAYS.—Mondays at 1.30, Mr. Langton; Tuesdays at 1.30, Mr. Willett; Wednesdays at 1.30, Mr. Smith; Thursdays at 1.30, Mr. Butlin; Fridays at 1.30, Mr. Marsh.

SURGICAL CONSULTATIONS.—Thursdays at 1.30, in the Operating Theatre.

ABDOMINAL SECTIONS FOR OVARIOTOMY, &C.—Mr. Harrison Cripps, on Fridays at 2, in Martha Operating Theatre.

OPERATIONS ON THE EYE.—Mr. Power and Mr. Vernon, on Tuesdays and Thursdays at 2, in the Ophthalmic Theatre.

ORTHOPÆDIC SURGERY.—Mr. Walsham, Mondays at 2.30.

DISEASES OF THE SKIN.—Dr. West, Tuesdays at 9.

DISEASES OF THE THROAT.—Mr. Bowlby, Tuesdays and Fridays at 2.30.

DISEASES OF THE EAR.—Mr. Cumberbatch, Tuesdays and Fridays at 2.

DISEASES OF THE EYE.—Mr. Power (In-patients), Tuesdays and Thursdays at 2, (Out-patients) Thursdays at 2.30. Mr. Vernon (In-patients) Wednesdays and Saturdays at 2, (Out-patients) Wednesdays and Saturdays at 2.30.

DISEASES OF WOMEN.—Dr. Champneys (In-patients), Mondays, Wednesdays and Fridays at 2. Dr. Griffith (Out-patients) Wednesdays and Saturdays at 9.

ELECTRICAL CASES.—Dr. Lewis Jones, Mondays, Tuesdays, Thursdays and Fridays at 1.30.

DENTAL CASES.—Mr. Paterson, Fridays at 9; Mr. Ackery, Tuesdays at 9, in the Out-patient Room.

CLINICAL LECTURES IN MEDICINE.—Fridays at 1 p.m. Dr. Gee, Friday, Nov. 17; Sir Dyce Duckworth, Friday, Nov. 24; Dr. Hensley, Friday, Dec. 1; Dr. Church, Friday, Dec. 8.

CLINICAL LECTURES IN SURGERY.—Wednesdays at 2.45 p.m. Mr. Smith, Wednesday, Nov. 15; Mr. Marsh, Wednesday, Nov. 22; Mr. Langton, Wednesday, Nov. 29; Mr. Marsh, Wednesday, Dec. 6; Mr. Butlin, Dec. 13.

CLINICAL LECTURES ON DISEASES OF WOMEN.—Dr. Champneys, every Thursday at 9 a.m. until Christmas.

CLINICAL LECTURES ON OPHTHALMIC SURGERY.—Mr. Henry Power, Mondays at 2.30 p.m.

MEDICAL POST-MORTEM EXAMINATIONS.—Dr. Tooth, daily at 12.30 p.m.

SURGICAL POST-MORTEM EXAMINATIONS.—Mr. J. Berry, daily at 1.45 p.m.

CLINICAL DEMONSTRATIONS IN INSANITY.—Dr. Claye Shaw, Mondays at 11 at Banstead Asylum.

The Entry.

THE total number of Students who have entered for the year 1893-4 is 156. This is, in the total, a good average entry, but on analysis we find that there is a decrease in the number of Students who have entered to the full course—doubtless an effect of the five years' curriculum and of the increased difficulty of the preliminary examinations. The numbers are: entries to the full course 95, entries to special courses of lectures on hospital work 33, Preliminary Scientific entries 28; total, 156.

A comparison with the preceding five years may not be devoid of interest, and we are indebted to the Warden for the following figures:—

Year.	Full entries.	Special, including Pr. Sc. classes.	Total.
1888	109	22	131
1889	111	50	161
1890	120	45	165
1891	104	44	148
1892	112	38	150
1893	95	61	156

ACKNOWLEDGMENTS.—*Medical Press;* C. H. R., Transverse Presentation of the Fœtus; H. J. M. W., Intravenous Saline injection in Cholera; *Guy's Hospital Gazette.*

Notices of Meetings and Fixtures.

ABERNETHIAN SOCIETY.

Nov. 16—F. E. Batten, M.B., on "Unusual Manifestations of Tubercular Meningitis."
„ 23—Reginald Brown, M.R.C.S., "Some Exigencies of Private Practice."
„ 30—J. A. Ormerod, M.D., "Post-febrile Paralyses."
Dec. 7—A. A. Kanthack, M.D., "Tuberculosis as an Infective Disease."
„ 14—J. Berry, F.R.C.S., "Goitre."

ATHLETICS.

RUGBY FOOTBALL, 1ST XV.

Nov. 18th—Middlesex Wanderers, at Richmond.
„ 22nd—Mason College, at Birmingham.
„ 25th—Royal Naval College, at Greenwich.
Dec. 2nd—Ealing, at Ealing.
„ 6th—Royal College of Science, at Raynes Park.
„ 9th—Brighton, at Brighton.

ASSOCIATION FOOTBALL, 1ST XI.

Nov. 22nd—
„ 25th—Uxbridge, at Ashbridge.
„ 29th—R.I.E.C., at Cooper's Hill.
Dec. 2nd—Chiswick Park, at Wormwood Scrubbs.
„ 6th—Old Brightonians, at do.
„ 9th—St. Albans, at St. Albans.
„ 13th—Army Service Corps, at Aldershot.

S.B.H. STUDENTS' CHRISTIAN ASSOCIATION.

Meetings on Thursdays, in the Inquest Room at the Hospital. Tea and coffee, 4.45 p.m. Address 5.0 p.m.

A Prayer Meeting is held in the vestry of the Hospital Church during the Session, daily (except Saturday), from 1 to 1.10 p.m.

Nov. 23rd—C. Y. Biss, Esq., M.D., F.R.C.P.
„ 30th—Rev. H. E. Brooke, M.A.
Dec. 7th—W. McAdam Eccles, Esq., M.B., F.R.C.S.
„ 14th—A. Mercer, Esq.

ST. BARTHOLOMEW'S HOSPITAL SMOKING CONCERT CLUB.

Dec. 2nd—French Room, St. James' Resturant, Piccadilly, W. Tickets 1s. each. Members are given one ticket to admit a friend. To be had from the Hon. Secs., P. W. G. SHELLEY and D. L. E. BOLTON.

CAMBRIDGE GRADUATES' CLUB OF ST. BARTHOLOMEW'S HOSPITAL.

The Eighteenth Annual Dinner will be held at the Café Monico, Nov. 16th, at 6.45 for 7 p.m. Dr. Norman Moore in the chair.